

10/618,125
April 15th, 2005
Reply to Office Action of 02/08/2005004

Via Facsimile

Remarks

This amendment is in response to the February 8th, 2005 Office Action.

At the Examiner's suggestion, a typo in Claim 1 has been corrected.

Applicant respectfully traverses Examiner's rejections of claims 1-22. The allowable subject matter of claims 3 and 11 is noted.

Rejection of claims 1, 2, 4-10, 12, 13 and 18-22 as being unpatentable over Campbell.

The Examiner has attributed to Campbell: "a method of making homogeneous LCT-epoxy polymers with HTC-oligomers" (para 12-16). This assertion is in error. Campbell does not teach LCT (liquid crystal thermoset) resins as applicant invention claims. Campbell, in fact, states that the preferred epoxy resins are aliphatic and cycloaliphatic (para 12-16), which would produce a resin with a poor thermal stability, and therefore teaches away from the present invention.

Further, the Examiner has attributed: "grafting at least one functionalized organic group onto at least one nano-sized HTC-material." In fact, Campbell does not disclose grafting at all. As described in paragraph 26 of Campbell, using organoalkoxysilane is a condensation reaction not a grafting reaction of the present invention. Although applicant teaches "silane" grafting, one of ordinary skill in the art would know that this is not the same thing as the organoalkoxysilane reaction disclosed in Campbell.

The examples given in Campbell are on the atomic scale. For instance, the formula shown after paragraph 26 is one atom of silicon in molecule. Applicant representation of the HTC material is a nano-sized particle, which comprises many atoms. This is a claimed difference from Campbell.

Applicant would also like to point out that the teachings of Campbell would not produce a polymer with a dielectric strength of at least 1.2 kV/mil. In addition, Applicant is unable to find in Campbell any teachings of what percentage of the polymer is an HTC material.

The above remarks pertain to all independent claims. In addition to these, however, applicant would also like to point out that claims 13, 14 and 22 teach the

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polymer as part of an electrical insulator. Campbell, in paragraphs 48-49, does not teach this. Campbell is an adhesive, and although it is used in electronics, it is not used as part of an insulation.

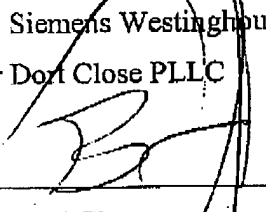
Rejection of Claim 14-17 as being unpatentable over Campbell in view of Smith '152.

Applicant does not believe that the deficiencies mentioned above in Campbell are rehabilitated by Smith except that Smith does discuss using epoxies in insulation. However, since Campbell discloses an adhesive, applicant does not think that there is any reason or motivation to combine these references.

In view of the above typo correction and remarks, applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,
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by


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